

UNDERSTANDING THE DARK WEB AND ITS IMPLICATIONS FOR POLICY

VIRGINIA TECH EXECUTIVE BRIEFING CENTER
MAY 18TH, 2018
900 N GLEBE RD
ARLINGTON, VA, 22203

AGENDA

8:30 am – 9:00 am **Registration**

9:00 am - 9:15 am **Opening Remarks**

9:15 am - 10:00 am **Indexing and the Dark Web: Is it Reliable?**
Moderator - Joseph DePlato, Bluestone Analytics
Speaker - Gareth Owenson, University of Portsmouth

10:00 am - 10:10 am **Break**

10:10 am - 10:55 am **Indexing a Dark Web Market**
Moderator - Aaron Brantly, Virginia Tech
Speaker - Nicolas Christin, Carnegie Mellon University

10:55 am - 11:05 am **Break**

11:05 am - 12:15 pm **Bitcoin and Cryptocurrencies**
Moderator - Liam Bowers, Bluestone Analytics
Panel -
Eric Jardine, Virginia Tech: *Drug Markets and Cryptocurrencies*
Aaron Brantly, Virginia Tech: *Bitcoin and Terrorist Financing*
Marie Vasek, University of New Mexico: *Cryptocurrencies and Financial Crimes*

12:15 pm - 1:30 pm **Lunch**

1:30 pm - 2:45 pm **Extremism, Malware Markets, and Public Use of Tor**
Moderator - Brandon Valeriano, Marine Corps University
Panel -
James Hawdon, Virginia Tech: *Online Extremism in the US*
Andrew Linder, Skidmore College: *Interest in Tor and Political Events*
Eric Nunes, Arizona State University: *Malware Markets on the Dark Web*

2:45 pm - 3:00 pm **Break**

3:00 pm - 3:30 pm **The Dark Web and Issues Teaching the New Analyst**
Moderator - Rachel Azafrani, Black House Cyber
Speaker - Kathleen Moore, James Madison University

3:30 pm - 3:45pm **Break**

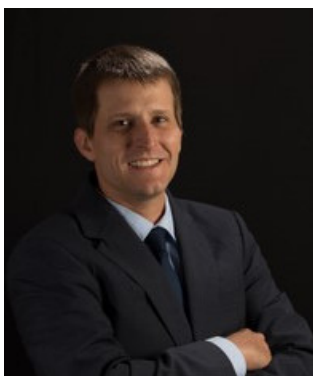
3:45 pm - 5:00 pm **Policy Panel**

5:00 pm - 5:15 pm **Closing Remarks**

SPEAKERS

Aaron Brantly - Bitcoin and Terrorist Financing

Dr. Aaron F. Brantly is Assistant Professor in the Department of Political Science and Hume Center for National Security and Technology Affiliated Faculty at Virginia Tech, Cyber Policy Fellow at the Army Cyber Institute and non-resident Cyber Fellow at the Combating Terrorism Center at West Point. He holds a Ph.D. in Political Science from the University of Georgia and a Master's of Public Policy from American University. His research focuses on national security policy issues in cyberspace including big data, terrorism, intelligence, decision-making and human rights. His books include: *The Decision to Attack: Military and Intelligence Cyber Decision-Making* (2016 UGA Press) and *US National Cybersecurity: International Politics, Concepts and Organization* (2017 Routledge).



Nicolas Christin - Illegal Market Indexing

Nicolas Christin is a professor at Carnegie Mellon University, jointly appointed in the School of Computer Science and in Engineering & Public Policy. His research is in computer and information security. He has spent the better part of the past decade studying online crime, and was in particular the author of the first empirical measurements of economic activity on online anonymous ("darknet") markets



James Hawdon - Cryptocurrencies and Financial Crimes

James Hawdon is a professor of sociology and Director of the Center for Peace Studies and Violence Prevention at Virginia Tech. Professor Hawdon's research focuses on how community relations influence rates of violence and how communities respond to violent incidents ranging from murder to warfare. He has recently turned his attention to how virtual communities influence their members and those who interact with the community. He has published papers on the consequences of exposure to online extremism, the rhetoric of online extremism, and other subjects



SPEAKERS

Eric Jardine - Drug Markets and Cryptocurrencies

Eric Jardine is an assistant professor of political science at Virginia Tech and a fellow at the Centre for International Governance Innovation (CIGI), a Canadian think tank focusing on governance challenges in the 21st century. His research focuses on various aspects of our new digital life, including the uses and abuses of the Dark Web, trends in cybercrime, the inherent politics of the public policy dilemmas surrounding both anonymity-granting technologies and encryption, as well as the channels by which new security technologies can actually make us less safe.

Andrew Linder - Interest in Tor and Political Events

Andrew M. Lindner is an Associate Professor of Sociology. He received a B.A. from Skidmore College and an M.A. and a Ph.D. from The Pennsylvania State University. He teaches courses on mass media, political sociology, sociology of sport, and research methods. His primary research interests are in political culture and the role of the state, the market, and civil society in structuring journalism. His work on these topics appear in such publications as Social Problems, Poetics, Contexts, New Media & Society, The Sociological Quarterly, Sociological Inquiry, and Information, Communication, & Society.

Kathleen Moore - Training Dark Web Analyst

Kathleen Moore is a former National Security analyst and technologist. She now teaches Intelligence Analysis at James Madison University in areas of Automated Structured Analytical Methods, Cyber Intelligence, Social Media Analysis, and Information Warfare. Her personal research interests include trust and credibility in online environments, online crisis communication, and digital risk assessment.

SPEAKERS



Eric Nunes - Malware Markets on the Dark Web

Eric Nunes is currently a PhD candidate at Computer Engineering at Arizona State University, where he is a member of Cyber-Socio Intelligent Systems Laboratory (CySIS) lab led by Dr. Paulo Shakarian. His research covers topics from Cyber Security and Artificial Intelligence, using data-driven perspectives. His current research is in argumentation models for attribution, data-driven cognitive models for malware analysis, and cyber threat intelligence gathering and analysis from darkweb using data mining techniques.



Gareth Owenson - Dark Web Indexing and Tracking

Gareth Owenson is a Senior Lecturer in the School of Computing at the University of Portsmouth, UK, holding a PhD (2007) in Computer Science and a BSc in Internet Technology. His work over the past 10 years has specialized in Internet Security, Cryptography and Distributed Systems, in particular darknets and cryptocurrencies. He has conducted some of the broadest scanning of these systems, and is an expert on indexing and the Dark Net. He is a member of the Pervasive Computing Research Group at the University of Portsmouth, and regularly works with both the US and UK governments on issues of dark web indexing and use.



Marie Vasek - Cryptocurrencies and Financial Crimes

Marie Vasek is an assistant professor in the Computer Science department at the University of New Mexico. She currently helps lead StopBadware, an anti-malware organization for which she started working in 2011. Her research focuses on cybercrime measurement, particularly web-based malware and abuse using cryptocurrencies. She is a 2016-2017 Google Anita Borg scholar. She received her PhD from the University of Tulsa.

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